1999 STAR FELLOWSHIPS FOR GRADUATE ENVIRONMENTAL STUDY Announcement of Availability

Opening Date: August 28, 1998 Closing Date: November 10, 1998

' ABSTRACT

The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is offering Graduate Fellowships for masters and doctoral level students in environmentally-related fields of study. The deadline for receipt of preapplications is November 10, 1998. Subject to availability of funding, the Agency plans to award approximately 100 new fellowships. Masters level students may receive support for up to two years. Doctoral students may be supported for a maximum of three years. The fellowship program provides up to \$34,000 per year of support. This amount covers a \$17,000 annual stipend, \$5,000 for authorized expenses, and up to \$12,000 for tuition and fees. Actual annual support may vary based on length of fellowship award and tuition and fees.

' GENERAL DESCRIPTION OF THE PROGRAM

Introduction

The EPA invites pre-applications for graduate fellowships in academic disciplines relating to environmental management including physical, biological, and social sciences and engineering. A pre-application provides the information needed for the merit review. Top ranked applicants following the merit review will be required to submit a brief formal application.

These fellowships are intended to help defray costs associated with advanced environmentally oriented study leading to the masters or doctoral degree. Instructions for completing and submitting pre-applications are found in the sections that follow. Instructions must be followed exactly or the submission will not be reviewed.

Purpose of the Program

The purpose of the fellowship program is to encourage promising students to obtain advanced degrees and pursue careers in environmentally related fields. This goal is

consistent with the mission of EPA, which is to provide leadership in the nation's environmental science, research, education, assessment, restoration, and preservation efforts. Both the public and private sectors will need a steady stream of well-trained environmental specialists if our society is to meet the environmental challenges of the future.

Eligibility

Applicants must be citizens of the United States or its territories or possessions, or be lawfully admitted to the United States for permanent residence. Resident aliens must include their green card number in their pre-application. This number may be verified with the Immigration and Naturalization Service.

Students do not need to be enrolled in or formally accepted in a full-time graduate program at the time they apply for a fellowship, but proof of enrollment or acceptance must be produced prior to the award of the fellowship. Students must attend a fully accredited U.S. college or university. Students must be pursuing a masters or doctoral degree in an environmentally related field of specialization (see fields of specialization below). Students who have completed more than two years in the masters program or four years in the doctoral program are not eligible.

The research proposed may be conducted outside the United States. However, EPA allows only \$5,000 for all expenses, including travel. See "Stipends and Allowances" for details.

Employees of the U.S. government must be able to prove separation from Federal service before accepting this fellowship.

Acceptance of this fellowship does not necessarily preclude acceptance of other scholarship, fellowship, traineeship, or grant aid. However, this fellowship may not be awarded to anyone who will simultaneously be receiving other federal assistance.

Eligible women, minorities, and disabled students are strongly encouraged to apply.

Tenure

The term of a graduate fellowship is negotiated with students and customarily covers a period of 9 to 12 months for each fellowship year. Students seeking a masters degree may be supported for a maximum of two years. Students seeking doctoral degrees may receive support for up to three years.

Stipend and Allowances

The fellowship provides up to \$34,000 per year of support. A maximum of \$68,000 will be provided for masters fellows (two years) and up to \$102,000 (three years) will be

provided to doctoral students. The \$34,000 annual support covers stipend, tuition, and expenses as follows:

- ! Stipends during 1999-2000 will be \$17,000 for 12-month tenures and prorated monthly at a maximum of \$1,417 for shorter periods. Funds for unused months are forfeited. Stipends are paid directly to the Fellow. At its discretion, each fellowship institution may supplement a Fellow's stipend from institutional funds in accordance with the supplementation policy of the institution.
- ! An expense allowance of up to \$5,000 will be provided to pay for items and activities for the direct benefit of the student's education, such as for health insurance, books, supplies, equipment, and travel to technical meetings.
 - NOTE: Fellows are expected to attend an annual EPA STAR Graduate Fellows Conference each June as long as they are in the program, unless the immediate needs of their research project make attendance impractical. Resources to support this travel are to be taken from the expense allowance. Specific instructions regarding the disbursement and management of the expense allowance will be provided during the award process.
- ! Support for tuition and academic fees, up to \$12,000 per year, will be paid directly to the institution. NOTE: For purposes of this fellowship, health insurance is not considered to be an academic fee. Health insurance costs may, however, be paid from the expense budget.

Criteria for Evaluation and Selection

Each student will be evaluated in terms of his or her potential for successful graduate study, as evidenced by academic records, recommendations, and career goals and objectives. Students at each educational level will be evaluated based on the information provided in the pre-application as described below under "Mandatory Format for Pre-Applications".

Pre-applications and letters of recommendation will be reviewed by experts from the appropriate degree fields. Students applying for fellowships must select a field of specialization from the table below. Reviewers are recruited based on the specialty fields represented by the pre-applications. Pre-applications from all specialties are judged within the following three categories:

- 1. Entering Graduate Students -- Applicants who will have obtained only a Bachelor's degree and have completed less than one year of a M.S. or Ph.D. program at the time of submission.
- 2. Doctoral Students -- Applicants who will have completed a M.S. and have completed less than one year of a Ph. D. program at the time of submission.

3. Continuing Doctoral Students -- Applicants who have completed at least one year of a Ph. D. program at the time of submission.

Reviewers will recommend the best applicants from each of these three categories. Finalists will be selected for award of the fellowship based on the availability of funds, merit evaluations, and program goals, such as, distribution of awards across disciplines, institutions and geography, degree level being sought, and other possible indicators of program balance. Only finalists will be required to submit the following:

- 1. EPA Form 5770-2, "Fellowship Application"
- 2. EPA Form 5700-49, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters"
- 3. Sealed official transcripts from all institutions (if so instructed by EPA).

EPA will provide the necessary forms to finalists.

WHERE AND WHEN TO SUBMIT

Pre-applications must be received at the contact point no later than 4:00 p.m., EST, on November 10, 1998. Pre-applications may be submitted by regular mail, express mail, or uniformed courier services. If using regular mail, allow sufficient time for delivery since applications MUST be at the contact point by 4:00 p.m. EST on November 10, 1998.

If sending by regular or priority U.S. mail, send the original AND SIX (6) COPIES of all required materials to:

STAR Fellowships NCERQA -- (8725R) US EPA 401 M Street, SW Washington, DC 20460

Use this address ONLY for U.S. mail!

If sending by express mail or courier, deliver the original AND SIX (6) COPIES of all required materials to:

STAR Fellowships NCERQA Room B-10105 US EPA - Ronald Reagan Building 1300 Pennsylvania Ave, NW Washington, DC 20004

Use this address ONLY for courier mail!

A telephone contact number is necessary for most courier deliveries. You may use **202/564-6939** for that purpose. NOTE: This is not an appropriate contact number for other information.

NOTIFICATION AND AWARD DATES

If you comply with the requirement to include a stamped, self-addressed postcard with your pre-application, you will be notified when we receive your package. Subject to the availability of funding, awards should be made by June 30, 1999 for the fall term.

' PAGE LIMITATION

Typeface must be 12 point or equivalent, with one-inch margins all around. Limitations for individual components of the pre-application are specified in the "Mandatory Format for Pre-Applications" which follows. Do not exceed these limits or the proposal will be ineligible. Do not reduce. Do not submit materials bound or in ring binders.

' SUBMISSION REQUIREMENTS

All pre-applications must be submitted in the exact format described below. All necessary information is provided. To clarify the instructions, a sample pre-application appears at the end of this announcement. Pre-applications must include three letters of reference in individually sealed envelopes, as described below.

MANDATORY FORMAT FOR PRE-APPLICATIONS

Items 1 through 5 should comprise the first page.

- **Item 1.a.** PERSONAL DATA -- provide your full name (last name first), current address, permanent address, and home and work telephone numbers. If you can be reached by fax or e-mail, include that information as well. (Optional -- for statistical reporting purposes only, we ask you to include your gender and race, e.g., black, white, Hispanic, native American.)
- **Item 1.b.** CITIZENSHIP STATUS -- state whether you are a U.S. citizen or permanent resident. If you are a citizen, give the city of your birth. If you are a resident alien, provide your green card number. EPA may choose to verify this information.
- **Item 2.** DEGREE SOUGHT -- state either masters or doctoral (or M.S., M.A., Ph.D., etc). Include the month and year the degree is expected.
- **Item 3.** PRE-APPLICATION CATEGORY -- entering graduate student, doctoral student, or continuing doctoral.

- **Item 4.a.** FIELD OF SPECIALIZATION CODE -- from list below. You MUST select only one. Your pre-application will be reviewed by individuals from the field you select.
- **Item 4.b.** NAME OF SPECIALIZATION -- from list below.
- **Item 5.a.** CURRENT SCHOOL AND DEPARTMENT -- Name and location of your current university, school and department.
- **Item 5.b.** NAME AND ADDRESS OF GRADUATE ADVISOR -- If you have a graduate advisor, give his or her name, address, and telecommunications data, including phone, fax, and e-mail, if available. If you do not yet have an advisor, write "N/A".
- TRANSCRIPT INFORMATION -- Provide, in tabular form, the following information taken from your transcripts: identify the institutions at which the credits were earned, dates, names and catalog numbers of courses taken, credit hours, grades received, and cumulative GPA for all courses taken at each degree level. If possible, course titles should not exceed the space available. Abbreviations are allowed. If courses were audited or not completed, note this information. If any institution you attended had a grading system different from the traditional "A, B, C..." system, explain the system in a succinct footnote to Item 6. Do not leave anything out. Include data from your entire college career. *DO NOT INCLUDE COPIES OF YOUR TRANSCRIPTS*. Fellowship winners will be required to submit official copies of transcripts for validation prior to the award of the fellowship.

ITEM 6 may take as many pages as necessary.

ITEM 7 must be completed on one page. If you have room, you may include ITEM 8 on the same page.

- **Item 7a. EXPERIENCE** -- List specifically relevant experience, including paid employment, military service, internships, residencies, special studies, volunteer work, etc. Give dates and a short description of your duties in each position, listing most recent first. Give names and addresses of employers. List only relevant experience.
- **Item 7b.** PUBLICATIONS -- If you have published in the technical literature, provide a bibliography here. If you have not yet published, write "NA".
- Item 8. STATEMENT OF OBJECTIVES -- Explain your academic and career goals

and how your proposed course of study or research will help you to achieve these goals. Include any background information you believe is pertinent and provide insight into why you have chosen the goals you are pursuing. You will be evaluated on your dedication to your studies and to an environmentally oriented career. This statement will also provide insight into your organizational, analytical, and written communication skills.

NARRATIVE STATEMENT -- The narrative statement will differ slightly at each academic level. All students must include a description of the scientific and, if appropriate, societal importance of their field of study. At the various levels, reviewers will be looking for answers to the following questions:

ENTERING GRADUATE STUDENTS: What are the degree requirements in your program? What is your planned course of study during the period of the fellowship? Do you know if you will be undertaking a special project? If so, describe it briefly. If you do not know, what project would you like to propose? Why would it be important?

DOCTORAL STUDENTS: Why do you want a doctoral degree? What are the degree requirements in your program? How does this program build on your former education? If you could become involved in a research project this year, what would it be? Why is it important? How will it advance your academic and career goals?

CONTINUING DOCTORAL STUDENTS: Provide a scope of work for your research project. The scope of work must be structured as follows:

- **A.** Goal of Research -- Introduce the problem. What is your hypothesis?
- **B.** Rationale -- What is the technical or social need for this research? What other work has been published on this subject and how do these results relate to your project?
- **C. Approach and Expected Results** -- How will you test your hypotheses? What scientific or other benefits are expected from this work?

Each academic level will have specific evaluation criteria pertaining to the narrative statement, as described in the section above. The page limitations for each educational level are as follows:

Entering Graduate Students -- 2 pages Doctoral Students -- 2 pages Continuing Doctoral Students -- 5 pages These page limitations include all figures, and tables. References may be on additional pages.

IMPORTANT INFORMATION ABOUT REFERENCE LETTERS

- 1. Each pre-application **MUST** include three reference letters from individuals who are knowledgeable about your academic record. If you have a sponsor or advisor in the program, one of these letters should come from that individual.
- 2. EPA is bound by regulation to require three letters. If the pre-application does not include three letters, it will not be reviewed.
- 3. The original letters and six (6) copies must be contained in an individual envelope sealed by the writer and must be included in the pre-application package. We will not accept reference letters sent separately.

Self Addressed, Stamped Post Card: Include this in your package so that we can notify you that we received your pre-application.

' FOR FURTHER INFORMATION

For additional information or assistance in preparing your pre-application, first consult the "Frequently Asked Questions (FAQs)" on the NCERQA Home Page (http://www.epa.gov/ncerqa). EPA also maintains a toll-free Help Line which is available Monday-Friday, from 9:00 am to 4:00 pm, EST. For Help Line assistance, dial 1-800-490-9194.

FIELD OF SPECIALIZATION CODES

- A1 Civil/Environmental Engineering
- B1 Other Engineering (e.g., chemical, mechanical, agricultural, systems, risk management etc.)
- C1 Chemistry and Materials Science
- D1 Oceanography (includes physical, chemical, and biological systems)
- E1 Geology (includes geochemistry and geophysics)
- F1 Geography
- F2 Atmospheric Sciences
- G1 Social Sciences (includes sociology, anthropology, psychology)
- **G2** Economics
- G3 Environmental Decision Making (includes risk communication, environmental policy, environmental history)
- **G4** Urban and Regional Planning
- H1 Aquatic Ecology and Ecosystems *
- **H2** Terrestrial Ecology and Ecosystems*
- J1 Toxicology
- J 2 Biochemistry, Biophysics, Bioengineering
- K1 Zoology
- **K2** Forestry
- K3 Entomology
- **K4** Ecological Risk Assessment
- L1 Microbiology
- L2 Molecular Biology/Genetics
- L3 Health Risk Assessment

' SAMPLE PRE-APPLICATION

The pages that follow constitute a sample pre-application for graduate fellowship.

NOTE!!!! Smart as he is, this hypothetical student probably would NOT receive an EPA fellowship because his curriculum has no obvious relationship to environmental concerns or the disciplinary degree he is seeking. His only chance would be if his narrative statement clearly made that connection. The purpose of this sample is to demonstrate format, not content.

^{*} These categories are designed for applications pertaining to the inter-relationship of organisms and their environments, where there is not a more specific EPA code available, such as Oceanography, Entomology, etc.

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SAMPLE PRE-APPLICATION FOR GRADUATE FELLOWSHIP

1.a. Name, Addresses, and Telecommunications Data:

BECKETT, Samuel John

Home Phone: 617/###-####

Current Address: Work Phone: 617/###-####

68 Dane Avenue Fax: 617/###-###
Somerville, MA 02899 Fax: 617/### E-mail: xxxxx@yyy.com

Permanent Address:

c/o John Beckett Phone: 219/###-####

RR 2, Box 98

Elk Ridge, Indiana 54096 White male

1.b. Citizenship Status: U.S. Citizen, born in Elk Ridge, Indiana (Note: if this student were permanent resident alien, he would indicate his green card number here.)

2. Degree Applying For: Doctoral degree (or Ph.D., ScD, etc.), expected 6/01

3. Level of Education at Start of Fellowship: continuing doctoral

4.a. Field of Specialization Code: K1

4.b. Name of Specialization: zoology

- 5.a. Current School and Department: Massachusetts Institute of Technology, School of Mathematics and Physics, Department of Theoretical Mathematics, Cambridge, MA
- 5.b. Name and Address of Graduate Advisor (Sponsor):
 - J. C. Armstrong

Chairman, Department of Theoretical Mathematics

464-82

Massachusetts Institute of Technology

Cambridge, MA 02899

Office Phone: 617/###-#### Fax: 617/###-####

E-mail: Xxxxxxx@mit.edu

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6. Transcript Data					
Institution	Year	Course #	<u>Title</u>	CreditHrs	<u>Grade</u>
Current GPA:	4.0	(4 point scale)		
MIT	1996	744	Special Project	5	In progress
"	"	740	Topology	5	In progress
"	"	735	Number Theory	4	In progress
"	"	722	Adv. Topics in Chaos	4	In progress
"	"	719	Special Project	5	A
"	"	716	Transfinite Math	5	A
"	"	715	Fuzzy Logic	4	A
"	"	712	Chaotic Systems	4	A
Caltech	12/95	MS in Physics	Awarded (Summa cum Laude)	GPA: 4.0	(4 point scale)
"	1995	Ph-96	Individual Study in Physics	8	A
"	"	Ph-85	Quantum Logic III	4	A
"	"	R-66	Technical Russian II	4	P
"	"	Ph-96	Individual Study in Physics	8	A
"	"	Ph-83	Quantum Logic II	4	A
"	"	R-65	Technical Russian I	4	Audit
"	1994	Ph-96	Individual Study in Physics	8	A
"	"	Ph-80	Quantum Logic I	4	A
"	"	Ph-77	Unification Theories	4	A
"	"	Ph-69	Cosmology	4	A
"	"	Ph-80	Quantum Logic I	4	Incomplete
"	"	Ph-96	Individual Study in Physics	6	A
"	"	Ph-66	Advanced Electromagnetism	4	Α
U. of Indiana	12/93	B.S. Degree	e Awarded (Summa cum Laude	e) GPA: 4.0	(4 point scale)
"	1993	620	Advanced Study in Math.	4	A
"	"	300	Religion, Science & Philos.	4	A
etc. (List all academic courses at all academic institutions for which you can produce transcripts. DO NOT LEAVE ANYTHING OUT.)					

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7a. Other Relevant Experience:

1/96 to Present Teaching Assistant

MIT, Department of Mathematics Philip LoNicro, 617/###-####

11/95 - 1/96 Invented a plasma energy

drive system

Patent Number 876GB5F457YD

etc. Limited to one page.

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7.b. Publications -- List all publications on which you are an author. Use a generally acceptable bibliographic format. This listing can be as long as necessary to accommodate all publications which are relevant to the area in which you are applying.

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8. Statement of Objectives (Do NOT exceed one page)

(This is a written account of your academic and environmental career goals, in which you relate your past accomplishments and future plans, and describe how your proposed plan of study or research will tie these together. This section is a key criterion for review, so be as articulate and thorough as possible.)

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9. Narrative Statement (Text and page number requirements differ for different educational levels. Be certain you follow instructions for this section <u>exactly</u>. It is a key review section.)

Sam Beckett, our hypothetical candidate, must provide a detailed scope of work for his proposed research, because he is a continuing PhD student. He may not exceed five pages in describing the goals, rationale, approach, and references for his project.

ENCLOSURES

- 1. (Mandatory!)
 - <u>Three recommendation letters</u> -- each original letter, plus 6 copies, must be contained in an individual envelope sealed by the writer and enclosed within the application package. If you have an advisor, one letter should come from your advisor.
- 2. <u>Self-addressed postcard</u> -- if you do not include the postcard, you will not be notified that we received your package.